

REMARKS

Claims 1-12 and 16-20 are pending in the application. New claims 21-37 are added via this Amendment.

OBJECTION:

Claim 6 has been amended to address an informality. Withdrawal of the objection to claim 6 is requested.

PRELIMINARY MATTERS:

Applicants respectfully submit that the Office Action contains erroneous interpretations, such that the Office Action should be withdrawn.

First, the materials discussed by the Examiner at col. 3, lines 18-24 of Takemura¹ do not properly correspond to the claimed materials. This is because col. 3, lines 18-24 of Sullivan does not clearly and sufficiently describe primary resins that are selected from one group consisting of an ethylene ionomer resin, polyester elastomer, polyurethane elastomer, polyolefin elastomer, polyamide elastomer, polyolefin resin, and styrene block copolymer.

Second, the Examiner states that; “Regarding claims 1, 7, 9-10 and 17, Sullivan discloses a golf ball having at least two pieces (col. 4, lines 50-58)”². However, there is no description or suggestion of a golf ball with at least two pieces in column 4, lines 50-58 in Sullivan ‘429.

¹ See page 2, last line of Office Action dated January 25, 2005.

² *Id.* at page 3, paragraph 2.

Third, col. 2, lines 6-10, of Sullivan '429 does not disclose at least one of a silicone rubber powder, a silicone resin powder, and a composite powder thereof, which are blended and uniformly dispersed into specific resins.³

Lastly, column 6, lines 38-55 of Sullivan '429 as cited by the Examiner⁴, does not disclose a composite powder that comprises silicone rubber particles surface coated with a silicone resin.

35 U.S.C. § 102:

Claim 16

Claim 16 is rejected under 35 U.S.C. §102(b) as being anticipated by Takemura et al. (U.S. Patent 5,733,977 [hereinafter "Takemura"]).

An exemplary aspect of claim 16 is the core portion having at least one of the silicone rubber powder, silicone resin powder, and composite powder thereof blended and uniformly dispersed, in a power form, into specific resins such as an ethylene ionomer resin. This feature contributes to providing excellent moldability, resilience and low-temperature properties that have not been achieved with conventional golf ball materials. As a result, the golf ball of claim 16 has improved flight and durability against consecutive strikes, as well as a soft feel when hit.

The Examiner alleges that Takemura discloses a golf ball having at least two pieces comprising: a core (1) portion formed of a composition based on at least one of primary resins

³ *Id.*

⁴ *Id.*

selected from one group consisting of an ethylene ionomer resin, polyester elastomer, polyurethane elastomer, polyolefin elastomer, polyamide elastomer, polyolefin resin, and styrene block copolymer.

It is, however, respectfully submitted that the Examiner's statement is incorrect because Takemura actually describes that:

“The diene rubber used in the present invention includes butadiene rubber (BR), styrene-butadiene rubber (SBR), acrylonitrile-butadiene rubber (NBR), ethylene-propylene-diene rubber (EPDM), natural rubber (NR), a mixture thereof and the like. It is preferred that the butadiene rubber is a high-cis butadiene rubber having a cis content of not less than 60%, particularly not less than 80%, is preferred.”

See col. 3, lines 18-24 of Takemura.

As will be appreciated, Takemura does not disclose the use of specific resins, such as ethylene ionomer resins and does not disclose the claimed features. In particular, Takemura is directed to a core containing a dynamically crosslinked rubber mixture of silicone rubber and a diene base rubber, which is largely different from the invention of claim 16. Further, Takemura does not teach or even suggest that its golf ball has improved low-temperature performance factors including rebound, flight distance and feel, and durability against consecutive strikes.

Accordingly, Takemura does not disclose the features of claim 16 and does not recognize the unexpected, advantages properties exhibited by the claimed golf ball, as discussed above and in the present specification. Therefore, significant patentable distinctions exist between the present invention and Takemura, such that the rejection of claim 16 should be withdrawn.

Claims 1, 2, 5-7, 9-12 and 17-20

Claims 1, 2, 5-7, 9-12 and 17-20 are rejected under 35 U.S.C. §102(b) as being anticipated by Sullivan (U.S. Patent 6,270,429).

An exemplary aspect of independent claims 1, 16 and 17 is that in a cover portion, intermediate portion or core portion, at least one of the silicone rubber powder, silicone resin powder, and composite powder thereof are blended and uniformly dispersed into specific resins, such as an ethylene ionomer resin, in a powder form. Sullivan '429 does not disclose these features.

First, Sullivan '429 discloses foam granules having a mean diameter of from 0.001" to about 0.200" (column 5, lines 26-27). The matrix and granules of Sullivan '429 may be formed from materials such as ionomers, non-ionomeric polyolefins, and silicone elastomer, etc. (column 6, lines 39-49).

However, the foam granules made of silicone elastomer in Sullivan '429 are different from the claimed silicone rubber powder, as would be understood by one skilled in the art. In Sullivan '429, the foam granules utilize either an open cell foam structure, a closed cell foam structure, or a hybrid structure thereof. In contradistinction, the silicone rubber powder of independent claims 1 and 17 do not have a cell foam structure, which would be appreciated by one skilled in the art and which evidences the differences between Sullivan '429 and the claimed features. For the Examiner's convenience, a general exemplary explanation of a silicone rubber powder is enclosed herewith as "Appendix." As the Examiner will appreciate, silicone rubber powder is obtained by a particular process and has remarkable characteristics, as described in the

Appendix. Applicants therefore submit that the claimed silicone powder features are distinguished from the foam granules of Sullivan '429 in form, process of making and characteristics.

Accordingly, the foam granules of Sullivan '429 differ from the claimed silicone rubber and resin powder, such that Sullivan '429 does not disclose each of the claimed features. Further, Sullivan '429 does not teach or suggest golf balls having improved low-temperature performance factors including rebound, flight distance and feel, and durability against consecutive strikes. As a result, significant patentable distinctions exist between claims 1 and 17, and Sullivan '429, such that the rejection under 35 U.S.C. § 102(b) should be withdrawn. The rejection of dependent claims 2, 5-7, 9-12 and 18-20 should likewise be withdrawn at least based on these claims depending from claims 1 and 17.

35 U.S.C. § 103:

Claims 3 and 4 are rejected under 35 U.S.C. §103(a) as being unpatentable over Sullivan '429 in view of Ueshima et al. (U.S. Patent 5,502,095 [hereinafter "Ueshima"]).

Sullivan '429 and Ueshima do not teach or suggest the claimed features. The patentable differences between Sullivan '429 and claim 1 have been discussed above. Ueshima does not supplement the deficient teachings of Sullivan '429 to render obvious claim 1. Applicants also submit that obviousness cannot be established by simply combining the references, absent some suggestion or teaching within the references supporting the combination. *Carella v. Starlight Archery*, 804 F.2d 135, 231 USPQ 644 (Fed. Cir. 1986).

Ueshima relates to a thermoplastic elastomer composition comprising (A) 50-98% by weight of a thermoplastic polyester elastomer, (B) 50-2% by weight of a rubber, and (C) a polyorganosiloxane in an amount of 0.01-10 parts by weight per 100 parts by weight of the total of the components (A) and (B). The thermoplastic elastomer composition of Ueshima is used for sports and leisure goods (e.g. golf club grip, baseball bat grip, swimming fin, water glass) (see column 11, 40-42). In the grip field, such as a club grip and a baseball bat grip, it is preferable to use the thermoplastic elastomer described above because it provides a low resilience. As one skilled in the art would appreciate, however, it would be difficult to use the thermoplastic elastomer described above in the "golf ball" field because golf balls need a high resilience in view of flying performance of the ball. Therefore, one skilled in the art would not have been motivated to apply the teachings of Ueshima to Sullivan to obtain the claimed features. Claims 3 and 4 are, thus, submitted as patentable at least due to their dependency on claim 1, such that the rejection should be withdrawn.

NEW CLAIMS:

New claims 21-37 are added to obtain more varied protection for the invention. Claims 21-37 are deemed patentable over the art due to their individual recitations, as well as their respective dependencies on claims 1, 16 and 17.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. §1.111
U.S. Application No. 09/732,786

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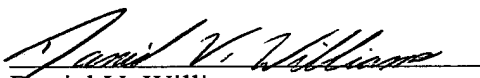
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